# Final
# Environmental Assessment
# for the
# East Avenue Security Upgrade
# at
# Lawrence Livermore National Laboratory/
# Sandia National Laboratories, California

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# Preface

This Environmental Assessment for the proposed East Avenue Security Upgrade of the 1.25-mile roadway running between the Lawrence Livermore National Laboratory and the Sandia National Laboratories, California, provides an analysis of the potential environmental impacts of the proposed action in order to determine whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact. It provides a brief discussion of the purpose and need for the proposed action, a description of the proposed action and alternatives, and an analysis of the potential environmental impacts of the proposed action and alternatives. The document complies with the Council on Environmental Quality's "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," *Code of Federal Regulations*, Title 4, Parts 1500–1508 (40 CFR 1500-1508); and the U.S. Department of Energy's National Environmental Policy Act Implementing Procedures (10 CFR 1021); and DOE Order 451.1B.

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## Executive Summary

The Lawrence Livermore National Laboratory (LLNL) in Livermore, California, is owned by the U.S. Department of Energy (DOE) and operated by the University of California. The Sandia National Laboratories, California (SNL/CA) is also owned by DOE; however, it is operated by Sandia Corporation, a subsidiary of Lockheed Martin Corporation. DOE proposes to administratively control a portion of East Avenue between South Vasco and Greenville Roads. The purpose and need for the project would provide DOE with the ability to restrict or close the roadway to the general public on either a temporary or permanent basis to improve security at LLNL and SNL/CA. This is consistent with DOE's overall security enhancement plan at both laboratories.

The alternatives considered to the proposed action are (1) no action and (2) construction of new facilities and relocation of personnel and equipment. Under the no-action alternative, DOE would not administratively control East Avenue between the LLNL and SNL/CA sites, and the short-term impacts associated with the construction and traffic congestion would not occur. However, the no-action alternative would not meet DOE's purpose and need. Under the second alternative, DOE also would not administratively control East Avenue between the LLNL and SNL/CA sites, but would undertake construction to relocate several essential facilities. Construction and operating impacts associated with Alternative 2 would be greater than those of the proposed action.

Environmental issues are described and discussed in proportion to their potential effects. The principal environmental issues discussed in this Environmental Assessment (EA) are those associated with construction of security kiosks, a truck inspection station, road improvements, and a badging facility; placement of additional fences, gates and signs (release of fugitive dust, construction waste generation, and increased noise and traffic); and transportation (impacts related to traffic diversions from the controlling of East Avenue). Potential cumulative impacts are also discussed. The environmental consequences of the proposed action would be associated with either the construction of the facilities, or increased traffic congestion on Livermore surface

streets during the construction phase. Construction impacts are expected to be minor and short-term.

Although there is some potential that cultural or paleontological materials would be encountered during excavations for the project, the probability is considered low. In the event that these materials are encountered during project construction, a formal process exists to stop construction, assess the find, and ensure that any resources would be appropriately managed. These procedures are considered as routine, ongoing actions that implement mitigation measures to avoid adverse impacts from continued operation of LLNL, as outlined in the *August 1992 Final Environmental Impact Statement and Environmental Impact Report for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore* (DOE/EIS-0157, SCH No. 90030 847) (DOE 1992), and its January 21, 1993, Record of Decision (58 FR 6268).

The California red-legged frog *(Rana aurora draytonii)*, a federally-protected amphibian, has been observed in several areas of the LLNL Livermore site, such as the centrally located Drainage Retention Basin; however, the completion of the proposed activities would not result in adverse impacts to the California red-legged frog populations or designated critical habitat at LLNL or SNL/CA. The proposed location of these activities is also not within nesting or foraging habitat of the white-tailed kite (*Elanus leucurus*) or burrowing owl (*Speotyto cunicularia*), two other protected special-status species at the LLNL site. Additionally, the proposed activities would not result in impacts to the California tiger salamander (*Ambystoma californiense*), a federal candidate species, or the loggerhead shrike (*Lanius ludovicianus*), a state species of special concern, present at SNL/CA.

# 1 Purpose and Need for Action

The purpose and need for the East Avenue Security Upgrade by DOE is to provide additional protection to essential LLNL and SNL/CA facilities and personnel along East Avenue. Due to recent world events and the emerging security threats, the DOE needs the ability to restrict or close the roadway to the general public on either a temporary or permanent basis to improve security at LLNL and SNL/CA. This is consistent with DOE's overall security enhancement plan at both the laboratories.

In 1991, there was a previous initiative that proposed to administratively control East Avenue after a bombing incident in the SNL/CA parking lot. An Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) were prepared, but the initiative was cancelled prior to issuance of the FONSI due to the lack of funding. The East Avenue project (as an "acquisition") was also considered as a proposed action within the 1992 Sitewide EIS/EIR.

# 2 Description of the Proposed Action and Alternatives

## *2.1 Proposed Action*

DOE proposes to create an administratively controlled area (ACA) on the DOE-owned 1.25-mile section of East Avenue between South Vasco and Greenville Roads. This public roadway lies between the Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories, California (SNL/CA), in Alameda County, California. The action would consist of administratively controlling seven tracts totaling about 16.3 acres.

The ACA of East Avenue would provide DOE with the ability to restrict or close the roadway to the general public on either a temporary or permanent basis. A security review, to be completed by the Laboratories, would determine the timing and means for controlling East Avenue on an ongoing basis. Alternatives to the prepared action were considered, including the alternative to take no action.

Controlling access to East Avenue would require vehicle and pedestrian portals at both the Vasco Road and Greenville Road ends of East Avenue. The area that would be created in the East Avenue corridor between the portals would be a joint LLNL and SNL/CA ACA. The proposal consists of construction of a new leased trailer or modular badging facility near the southeast corner of East Avenue and Vasco Road; a Vasco Road control point maintained 24 hours a day, seven days a week; a Greenville Road control point maintained 24 hours a day, seven days a week; and a new truck inspection station located to the northwest side of the East Avenue-Greenville Road control point. Modifications to East Avenue would include a vehicle turnaround area, and traffic-stacking lanes at both ends of East Avenue, to ensure that traffic would not back up into adjacent intersections. Pedestrian and bicycle access would continue to be provided. Additionally, fences along East Avenue may be relocated to allow more open access between LLNL and SNL/CA, and new signage would be appropriately placed on East Avenue, Vasco Road, Greenville Road, Patterson Pass Road, and the Interstate 580 freeway to alert traffic to the roadway modifications and federal access rights (per 10C.F.R. 860).

The Vasco Road control point would be positioned approximately 400 feet east of Vasco Road and would consist of a minimum of two vehicle portals

(supporting three incoming lanes of traffic) and one pedestrian portal. There would also be two exit lanes associated with this control point with no exit portals. Approximately 700 feet east of Vasco Road, and beyond the vehicle portals, "State Department-style" movable vehicle barriers would be installed across the entire roadway. These barriers would be normally flush with the roadway but could be activated by the portal access control officer to prohibit unauthorized access into the ACA. The Greenville Road control point would be located approximately 300 feet west of Greenville Road and would consist of one inbound and one outbound lane, supported by one portal kiosk. The vehicle barriers, as described above, would be located approximately 750 feet west of Greenville Road. Staffing of the new badge office and security kiosks would be accomplished with existing SNL/CA personnel.

The joint LLNL/SNL/CA truck inspection station would be located on the north side of the East Avenue-Greenville Road control point with a turn lane to support the inspection station located approximately 200 feet west of Greenville Road. The entrance would be of adequate size to provide vehicle queuing for the worst-case (peak) delivery periods. A covered inspection shed would be approximately 30 feet by 80 feet and would accommodate a large double-trailer big rig. The inspection area would also include a small office and restroom of approximately 600 square feet total. The exit of the inspection shed would be equipped with movable vehicle barriers to prevent passage prior to inspection. The inspected trucks would exit the inspection area back onto East Avenue (within the ACA) and would continue to the respective LLNL or SNL/CA shipping/receiving areas. LLNL would operate the vehicle inspection station during normal working hours with existing personnel.

### *2.1.1 Construction*

The proposed activity would consist of site improvements including new construction of a vehicle inspection station and a new leased trailer or modular badging facility; construction of portal kiosks; excavation; grading; trenching for utility connections; road improvements; paving access and parking areas; installation of curbs, gutters, sidewalks and landscaping; installation of storm water drains connecting to existing storm water drains; and debris removal. Additionally, the proposed administrative control of East Avenue would require that traffic be rerouted away from the access points during construction.

Appropriate signage would be placed on East Avenue, Greenville Road, Vasco Avenue, and (if necessary) Tesla Road prior to the points of necessary short-term traffic diversions.

### *2.1.2 Traffic Diversions*

The completion of the proposed administrative control of East Avenue would require that vehicle and truck traffic be redirected. Permanent signage would be placed on East Avenue, Greenville Road, Vasco Road, the 580 freeway, and (if necessary) on Patterson Pass Road to alert truck traffic that all trucks would be required to enter at the new East Avenue-Greenville Road Control Point for inspection. Signage would also direct visitors to respective LLNL and SNL/CA badge offices and to alert vehicles that East Avenue has been restricted to the general public and direct them to alternate routes. Access to LLNL and SNL/CA would be limited to those on official business or those who have appropriately authorized and sponsored access to supporting facilities such as the Federal Credit Union, LLNL pool, auditoriums for presentations, and sponsored tours.

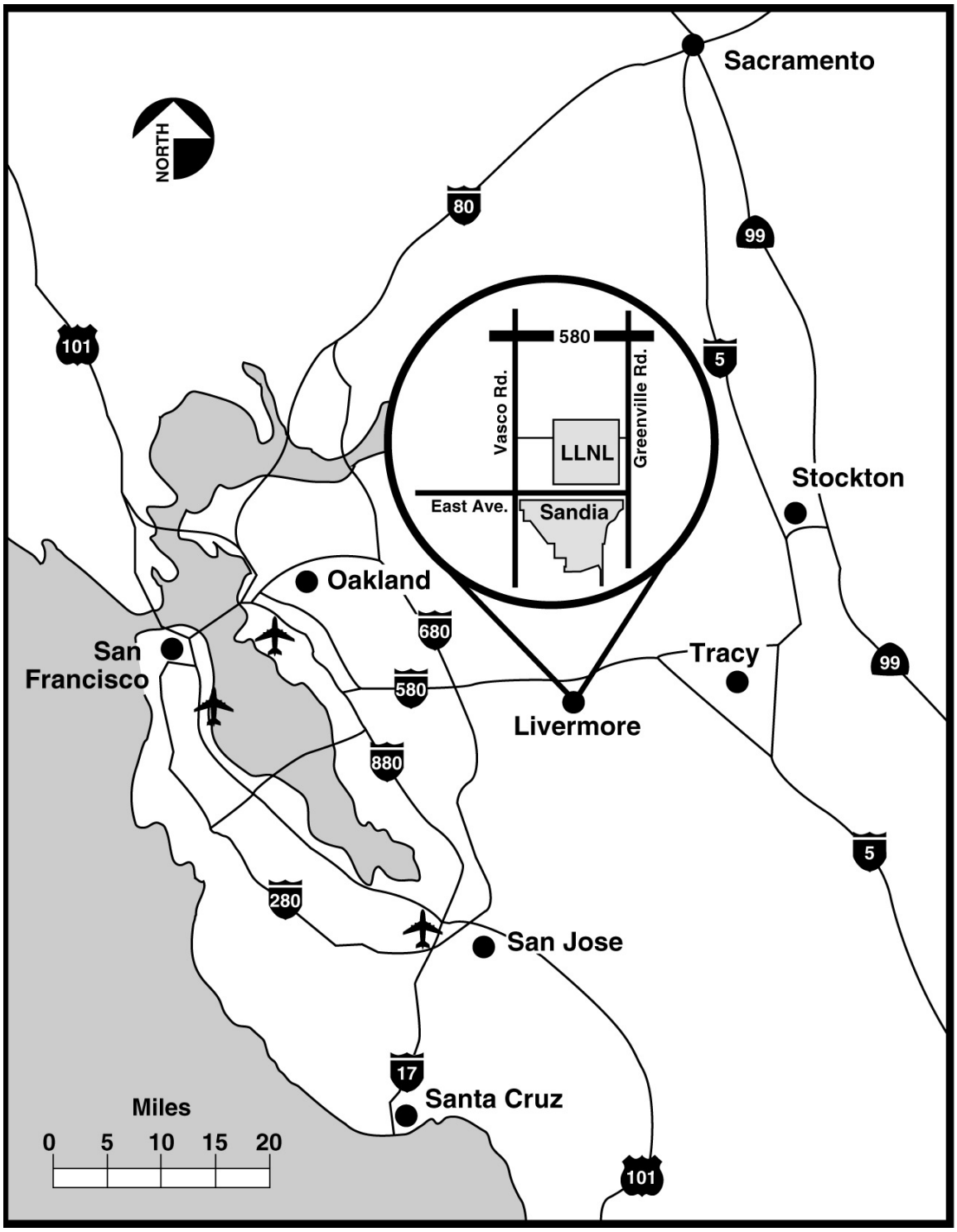


**Figure 2-1 Overview of the San Francisco Bay Area and the LLNL and SNL/CA Sites**

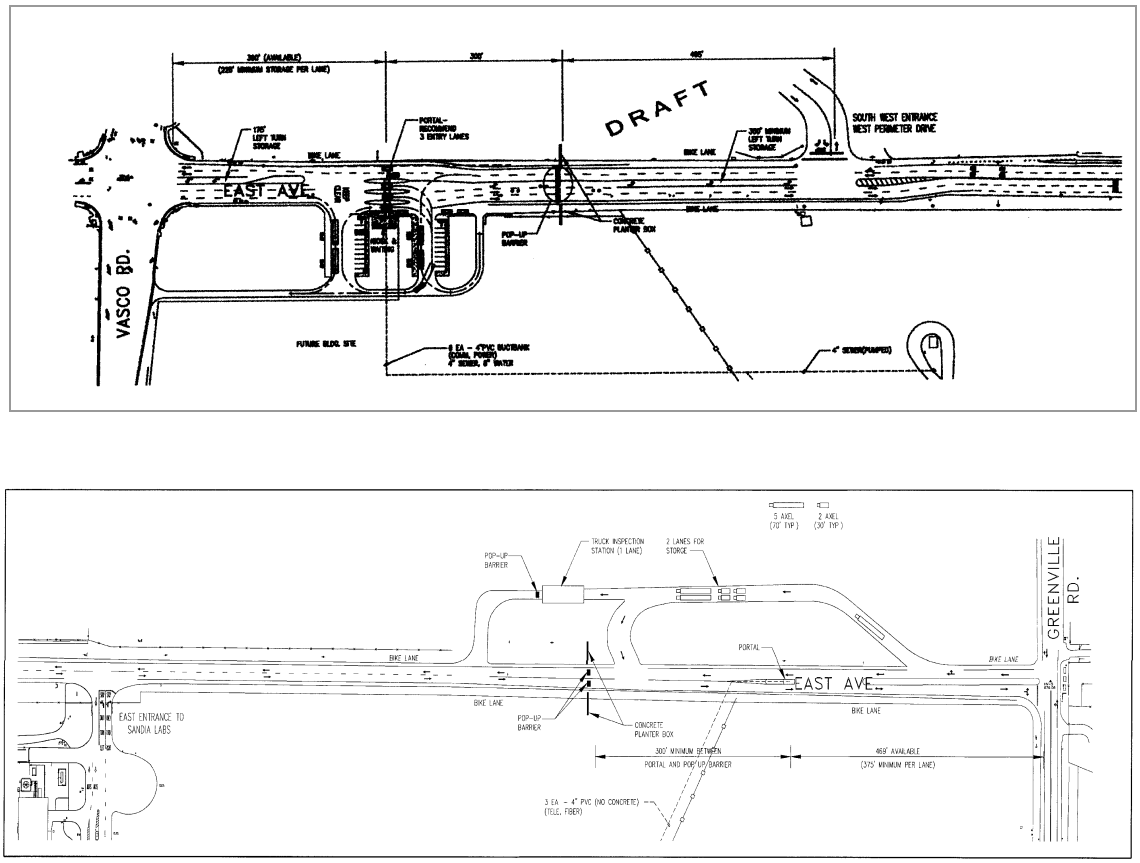


**Figure 2-2 Location of the Proposed Action**

## *2.2 Alternatives to the Proposed Action*

### *2.2.1 No-Action Alternative*

DOE currently proposes to provide additional protection for LLNL and SNL/CA essential facilities and personnel along East Avenue by administratively controlling East Avenue. The No-Action Alternative would mean that the public would have continued access to roadways near sensitive facilities at both LLNL and SNL/CA. This alternative would leave the essential facilities and personnel at LLNL and SNL/CA vulnerable to emerging security threats, such as sabotage and vandalism. The short-term impacts associated with the construction, such as generation of fugitive dust and noise and traffic diversions would not occur; however, the No-Action Alternative would not meet DOE's purpose and need.

### *2.2.2 Construction of New Facilities and Relocation of Personnel and Equipment*

Under the second alternative, DOE would not administratively control East Avenue between the LLNL and SNL/CA sites; however, additional construction of several facilities would be needed to house the essential programs that would be relocated away from East Avenue. At the LLNL site, activities in Buildings 111, 113, and 115 (B111, B113, B115) and accompanying personnel and equipment would need to be relocated onsite in a classified area. At the SNL/CA site, activities in Building 912 and accompanying personnel and equipment would need to be relocated to another classified area. At this time, there are no excess or unused facilities at LLNL or SNL/CA that could be economically modified to support these programs; therefore, new construction of four facilities, with approximately 552,000 sq. ft. (LLNL, 424,206 sq. ft./SNL/CA, 128,241 sq. ft.) would be needed to provide housing for these existing personnel and equipment. If this proposal were to be adopted, the associated construction and operating impacts would be much greater than for the proposed action. Therefore, the alternative of constructing new facilities and relocating personnel and equipment at both LLNL and SNL/CA was not considered further.

# 3 Description of the Affected Environment

A brief description of the affected environment surrounding the LLNL and SNL/CA sites is presented in this section as it relates to the scope of the proposed action and alternatives. A more detailed description can be found in the 1992 Sitewide EIS/EIR.

## *3.1 LLNL and SNL/CA Site Description*

The LLNL site occupies a total area of approximately 3.3 $km^2$ (821 acres) at the southeast end of the Livermore Valley. The SNL/CA site is located on 410 acres across East Avenue and south of the LLNL site. These sites are located about 80 km (50 mi) east of San Francisco, in southern Alameda County, California (Figure 2-1). Activities at the LLNL and SNL/CA sites are varied in nature, with the vast majority dedicated to research and development programs. The LLNL site is bordered by Greenville Road to the east, East Avenue to the south, Vasco Road to the west, and Patterson Pass Road to the north. A very small amount of low-density residential lies to the east of the Livermore site, and agricultural land extends to the foothills that define the eastern margin of the Livermore Valley. Land immediately north of Patterson Pass Road is light industrial, and a 200-hectare parcel of open space to the northeast has been rezoned to allow additional light industry. Beyond Vasco Road to the west, the land use ranges from low to high-density single-family residential. South of the site, East Avenue separates the LLNL site from the SNL/CA site. Further to the south, property is primarily open space and ranchettes, with some agricultural use (LLNL 2001), although new residential development along South Vasco Road (immediately west of the SNL/CA site) and Tesla Road (south of SNL/CA) has been planned by the City of Livermore.

## *3.2 Topography, Geology, and Soils*

The Livermore Valley is characterized by nearly level, shallow-to-deep soils that vary in texture from clays to sandy clay loams or mixed gravels. The soils tend to be high in sodium, calcium, magnesium, iron, chlorides, and sulfur, and low in organic matter, nitrates, phosphates, and potassium. The characteristics of the soil series found at the LLNL and SNL/CA sites are hard when dry and

plastic when wet; the soils have high permeability and high water-retention capacity. Because the LLNL site is nearly flat, there are no areas of potential slope instability with the exception of banks along arroyos (DOE 1992). The terrain on the southern portion of the SNL/CA site has up to a 3% grade; however, in the area where the proposed badge office/visitors center would be located, the land is relatively flat and has no potential for slope instability.

### *3.3 Seismicity*

The LLNL and SNL/CA sites are located in a region that has experienced earthquakes within historical times. The effect of seismic activity is likely to be confined to ground-shaking with no surface displacement (DOE 1992). Active faults considered capable of causing strong ground motion at the LLNL and SNL/CA site have been identified, and the potential impact on operations assessed (DOE 1992). Figure 3-1 shows the known faults in the vicinity of the LLNL and SNL/CA sites.

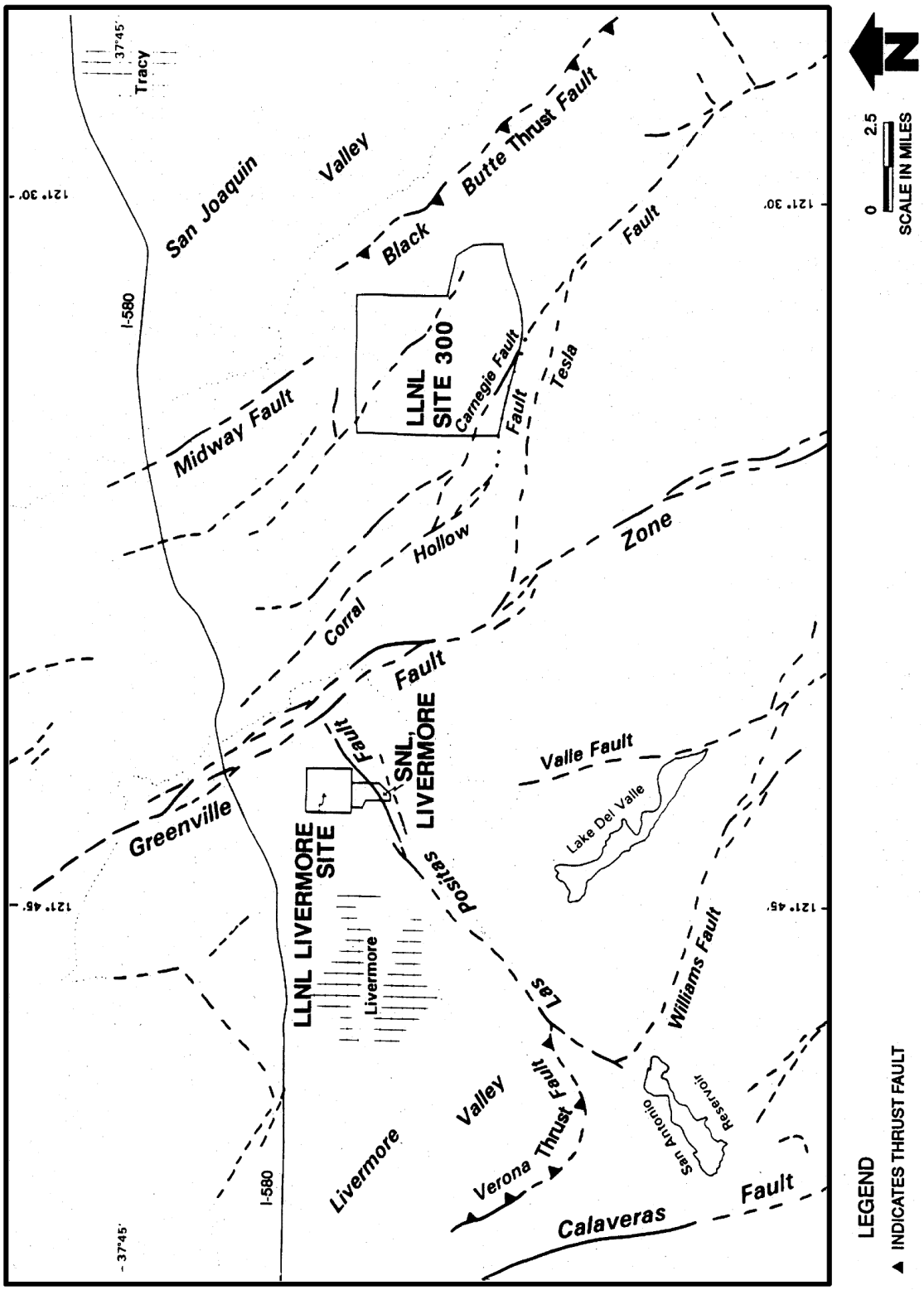


Figure 3-1 Geologic Map Showing Known Faults in the Vicinity of the LLNL and SNL/CA Sites (Source: DOE 1992)

## *3.4 Climate and Air Quality*

### *3.4.1 Climate*

The Livermore Valley is characterized by mild, rainy winters and warm, dry summers. The average daily maximum temperatures range from 56.3 °F (13.5°C) in January to 89.4°F (31.9°C) in July. The average daily minimum temperatures range from 36.1°F (2.3°C) in January to 54.0°F (12.2°C) in July. The average annual daily temperature is 59.2°F (15.1°C) (SNL 2002).

Both rainfall and wind exhibit strong seasonal patterns. Most of the annual rainfall, which averages 36.9 cm (14.5 in.)(SNL 2002), occurs between October and April and is associated with migratory, low-pressure systems from the Gulf of Alaska. Prevailing winds are from the west and southwest from April through September.

### *3.4.2 Air Quality*

The LLNL and SNL/CA sites are located within the area administered by Bay Area Air Quality Management District (BAAQMD). With respect to attainment of the National Ambient Air Quality Standards, this area is designated as "non-attainment" for federal and state ozone and is "non-attainment" or "unclassified" for federal and state $PM_{10}/PM_{2.5}$, and "in attainment" for all other criteria pollutants (BAAQMD 2002).

## *3.5 Hydrology*

The LLNL and SNL/CA sites are located at the eastern end of the Livermore Valley groundwater basin. Recharge to the basin is largely from arroyos originating in the foothills, including Arroyo Seco and Arroyo Las Positas.

### *3.5.1 Surface Water*

The major surface drainages in the Livermore Valley are the Arroyo Valle, Arroyo Las Positas, Arroyo Mocho, Arroyo Seco, Cottonwood Creek, and Tassajara Creek. These surface streams are all intermittent and flow generally to the west. Only Arroyo Las Positas and Arroyo Seco cross the LLNL Livermore site. Arroyo Seco crosses the southwest corner of the LLNL site and receives a minor amount of LLNL site runoff. Arroyo Las Positas receives the majority of the LLNL Livermore site runoff. All surface runoff from SNL/CA is discharged into the Arroyo Seco (DOE 1992), which crosses the site from southeast to northwest.

Storm water on the LLNL site is channeled through storm drains and open ditches designed to accommodate a 10-year storm event. Some surface water is directed through storm channels into the excavated and lined, 4-acre drainage retention basin (DRB) in the central portion of the site. The DRB was constructed as one of the measures to limit the movement of historic contamination present in groundwater under the LLNL site. To accomplish this, the DRB captures surface water and prevents it from infiltrating downward into the water table. The depth of the DRB ranges from 4 to 14 ft. The lining consists of 12-mil PVC plastic covered with 16 in. of fill (DOE 1996). A second basin constructed by LLNL to recharge groundwater is located in the west perimeter area at SNL/CA.

The SNL/CA storm water conveyance system transports surface runoff to the Arroyo Seco or to a ditch-channel along East Avenue. The channel along East Avenue is predominately dirt, and runoff eventually infiltrates into the ground or evaporates. During heavy storms, the water in the channel flows west and eventually discharges to the Arroyo Seco via an underground corrugated pipe (SNL 2002).

The LLNL site has a large groundwater cleanup and environmental restoration program. Contaminated groundwater is pumped from individual wells, sent to one of many treatment facilities, and, if the treated groundwater meets discharge limits, either discharged to surface drainage channels or routed to the central DRB. Water from most of these treatment facilities remains in the DRB until it is released through onsite storm drainage channels to the Arroyo Las Positas. A LLNL-managed recharge basin, which receives treated groundwater from the LLNL mainsite Treatment Facility A, is situated on the northwest side of the SNL/CA in the security buffer.

Wastewater discharge permits are issued by the Livermore Water Reclamation Plant (LWRP) for discharges to the municipal sanitary sewer. The San Francisco Bay Regional Water Quality Control Board issues a NPDES permit for storm water discharges associated with industrial activity and low-threat non-storm water discharges. Treated groundwater discharges are regulated through a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision, and Waste Discharge Requirements issued by the San Francisco Bay Regional Water Quality Control Board (DOE 1992).

### *3.5.2 Groundwater*

A study of the water table configuration below the LLNL site showed the direction of groundwater flow to be generally westward (DOE, 1992), with a depth to groundwater between 110 ft in the southeast corner to 30 ft in the northwest corner. The depth to groundwater at SNL/CA ranges from 80 ft in the northwest corner to 126 ft on the east side of the site (SNL 2002).

### *3.5.3 Floodplains and Wetlands*

A study was performed in 1986 for the Federal Emergency Management Agency (FEMA) to determine flood hazards in the Alameda County/Livermore Area. This study showed three areas where there is the potential for minor shallow flooding: Arroyo Las Positas (LLNL), an area near the East Gate (LLNL), and Arroyo Seco (SNL/CA). There are no existing onsite structures within the 100-year floodplain at any LLNL or SNL/CA site location (DOE 1992). The proposed project would not be within the 100-year floodplain.

There are several wetlands at the LLNL site, including the entire Arroyo Las Positas. The 1992 Sitewide EIS/EIR identified three locations of wetlands totaling 0.36 acres (1,457 $m^2$) (DOE 1992). A more recent wetland delineation conducted during the summer of 1997 identified approximately 2 acres (8,094 $m^2$) (Jones and Stokes 1997). The wetlands are mostly comprised of cattails and sedges, but there are some locations where willows have become established. Species observed at these wetlands include the following: saltgrass (*Distichilis spicata*), willow (*Salix sp.*), cattail (*Typha sp.*), curly dock (*Rumex crispus*), Italian ryegrass (*Lolium sp.*), and evening primrose (*Oenthera biennis)* (Jones and Stokes 1997). Most wetlands are dominated by saltgrass, and some wetlands have more species diversity than others.

The wetland area of the SNL/CA site is a riparian corridor along approximately 1370 feet of the Arroyo Seco channel and occupies 0.44 acres. In 1998, SNL/CA proposed a project to restore a portion of the arroyo embankments and streambed. The *Floodplain/Wetlands Assessment for Proposed Embankment and Streambed Restoration Project in the Arroyo Seco* (SNL 1999) was used to assess this project and disturbed areas were replanted in December 1999. SNL/CA is required by the California Department of Fish and Game to monitor the replanted wetland for three years (SNL 2002).

### *3.6 Vegetation and Wildlife*

The LLNL site is mostly a developed area that provides only limited wildlife habitat because of the high degree of human activity and the few areas of undisturbed vegetation. Annual wild oat along with non-grass annuals and perennials now dominate the grassy areas of the site (DOE 1992). The SNL/CA site consists primarily of grassland. Localized areas of coyote brush scrub, riparian woodland, and aquatic habitat are also present. Areas developed and disturbed by Sandia operations constitute an additional habitat type, designated altered habitat (SNL 2002).

The LLNL site hosts numerous birds, reptiles, and amphibians with a minimum of three species of amphibians and reptiles, 10 species of mammals, and 31 species of birds. Blacktail jackrabbits (*Lepos californicus*) are the most common mid-size wild mammals present; and gophers, snakes, and field mice can be found in the undeveloped areas of the LLNL site. Typical water bird species that have been found to use the DRB, include Pied-billed grebe (*Podilymous podiceps*) and green-backed heron (*Butorides straitos*).

The SNL/CA site also hosts numerous birds, reptiles, and amphibians with a minimum of five species of amphibians and reptiles, 14 species of mammals, and 58 species of birds. California ground squirrels (*Spermophylus beecheyi)* are the most common wild mammals present.

### *3.7 Sensitive Species*

Resource surveys of LLNL and SNL/CA were conducted in 1986 (Orloff 1986), and a biological assessment in 1991 (pursuant to the U.S. Endangered Species Act and the State of California Endangered Species Act) addressed the status of threatened, endangered, and other species of concern (referred to as sensitive species) that may occur or were known to occur in these areas at that time (DOE 1992). Although several listed and proposed endangered and threatened species of plants and animals may occur in the general area of the LLNL and SNL/CA sites, the U.S. Fish and Wildlife Service (USFWS) determined that, to the best of its knowledge, in 1991 these species were not known to occur within the boundaries and proposed future growth areas of these sites at the time of this assessment (USFWS 1991). Since that time, pairs of one state- and federally-protected bird species, the white-tailed kite, have been

observed nesting on the LLNL site near the East Gate and along the eastern and northern site boundaries. In 1998, six nesting pairs of white-tailed kites were successful in fledging 14 young. Also, one state and federal species of special concern, the burrowing owl (*Speotyto cunicularia*), had been found in the north and west buffer zones of the LLNL site during certain years. The California red-legged frog (*Rana aurora draytonii*) has also been observed in several areas at the LLNL site, including the Arroyo Las Positas and the DRB, and both LLNL and SNL/CA appear to contain portions of critical habitat as designated by the USFWS. To date, the California red-legged frog has not been found at SNL/CA. California ground squirrel *(Spermophilus beecheyi)* burrows located in the open grassland at SNL/CA provide potential habitat for California tiger salamanders *(Ambystoma californiense*) and western burrowing owls *(Speotyto curnicularia)*. Both California tiger salamanders and burrowing owls have been observed in the past years at Sandia in the western buffer area near the site of the LLNL recharge basin; however, surveys conducted in 2001 found no California tiger salamanders or burrowing owls at the recharge basin or elsewhere at SNL/CA or LLNL. During the 2001 survey conducted at SNL/CA, three nest sites for loggerhead shrikes were observed. These nest sites are located along the east and west perimeters of the developed area of the site. Loggerhead shrikes are a state species of special concern.

### *3.8 Land Use and Population*

Land uses for LLNL and SNL/CA site are addressed together in Section 3.1.

In 1990, the population of the area within an 80-km (50-mi) radius of the LLNL and SNL/CA sites was approximately 6.9 million persons (DOE 1992). Based on the 2000 Census, the population of the City of Livermore is about 73,345. In Fiscal Year 1999, 9,631 persons worked at LLNL (LLNL 2001); 1,272 of these workers were contractors and support personnel; DOE personnel accounted for 142 onsite workers; the remaining 8,217 were employees of the University of California. Currently, 1,318 persons work at SNL/CA; 1, 044 of these workers are employed by the Sandia Corporation (includes exempt, nonexempt, limited term, post docs, students, and interns), and the remaining 274 are contract personnel.

### *3.9 Cultural Resources*

A background literature search indicates that one historical site of unknown importance has been reported in the Arroyo Seco at the LLNL site, in an area that would not be affected by construction activity. No other prehistoric or historic sites older than 100 years have been identified or recorded for the proposed location of the project or discovered during any of the ongoing cultural resource investigations conducted for the LLNL or SNL/CA sites, in general. LLNL is currently involved in consultation with the State Historic Preservation Officer and DOE to discuss issues aimed at fulfilling DOE's short-term and broader, long-term cultural resource management obligations as outlined in Section 106 of the National Historic Preservation Act. There is no evidence of prehistoric or historic archeological sites at SNL/CA. None of the SNL/CA buildings are historically significant and they have been determined to not be eligible for the National Register (SNL 2002).

### *3.10 Paleontological Resources*

In December 1997 and January 1998, paleontological resources dating to the late Pleistocene were found in the northeast quadrant of the LLNL site during construction of the National Ignition Facility (NIF). Materials found include the fossil remains of two mammoths and two horses within an approximately 700-ft × 300-ft area. The fossil locales lie at a depth of approximately 20 to 35 ft below ground surface in an unnamed valley fill deposit that lies directly above the Livermore Formation.

One locale contained the partial skeleton of a mammoth (*Mammuthus columbi*), including a portion of the skull, jaw teeth, ribs, vertebrae, humerus, and tusk; and a second locale contained a partial pelvis (innominate bone) of a horse (likely *equus*). These materials were excavated under an Antiquities Permit granted to the DOE by the U.S. Department of the Interior. The materials have been curated into the collection of the University of California at Berkeley Museum of Paleontology.

A third locale was also identified as containing a partial mammoth skeleton, and a fourth locale was identified as containing a partial horse skeleton. Because these sites would not be disturbed by NIF construction activities, the exact locations of the fossils were recorded and the fossils were left in place.

There are no known paleontological resources at SNL/CA.

# 4 Potential Impacts of the Proposed Action and Alternatives

## *4.1 The Proposed Action*

DOE proposes to create an administratively controlled area (ACA) on the 1.25-mile section of East Avenue between South Vasco and Greenville Roads. This public roadway lies between the Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories, California (SNL/CA), in Alameda County, California. The action would consist of administratively controlling seven tracts totaling about 16.3 acres.

The ACA of East Avenue would provide DOE with the ability to restrict or close the roadway to the general public on either a temporary or permanent basis. Because the final disposition of the roadway has not yet been determined, this assessment covers the scenario that would have the greatest impact on the environment. That scenario would be administrative control of the road to the general public, with access limited to those on official business or those who have appropriately authorized and sponsored access to supporting facilities such as the Federal Credit Union, LLNL pool, auditoriums for presentations, and sponsored tours.

Controlling access to East Avenue would require vehicle and pedestrian portals at both the Vasco Road and Greenville Road ends of East Avenue. The area that would be created in the East Avenue corridor between the portals would be a joint LLNL-SNL/CA ACA. The proposal consists of construction of a new leased trailer or modular badging facility on SNL/CA land at the southeast corner of East Avenue and Vasco Road intersection; a Vasco Road control point; a Greenville Road control point; and a new vehicle inspection station located on the north side of the East Avenue-Greenville Road control point. Modifications to East Avenue would include a truck turnaround area, and traffic-queuing lanes at both ends of East Avenue to ensure that traffic would not back up into adjacent intersections. Pedestrian and bicycle access would continue to be provided. Additionally, fences along East Avenue may be relocated to allow more open access between LLNL and SNL/CA, and new signage would be appropriately placed on East Avenue, Vasco Road, Greenville Road, the 580 freeway, and Patterson Pass Road to alert traffic to the roadway access modifications and federal access rights (per 10 C. F. R. 860).

### *4.1.1 Potential Impacts of Construction*

Potential construction-related impacts from roadway modifications, the building of the new badging facility, construction of the truck inspection station, and related trenching for the extension of water, electrical, sanitary sewer, and telephone lines from existing onsite utilities, would include increased fugitive dust, noise from general construction activities and equipment, temporary onsite traffic disruptions near the project areas, and disposal of waste and debris. Fugitive dust emissions would be mitigated by water spraying of roads, excavations, and exposed piles of excavated materials. Construction equipment and vehicles would be properly muffled to reduce noise impacts. Additionally, signage would be placed on East Avenue, Greenville Road, and Vasco Avenue directing construction traffic and alerting the public and lab employees to short-term traffic alterations. Construction of the proposed project would be phased to ensure that both the Greenville Road/East Avenue and the Vasco Road/East Avenue rerouting of truck and vehicular traffic would not block access to the main gate at SNL/CA and the southwest gate of LLNL.

Prior to construction-related activities, a survey would be conducted to determine the presence or absence of the California tiger salamander (SNL/CA), the California red-legged frog (LLNL only), the loggerhead shrike (SNL/CA only), and the white-tailed kite in potential habitat areas near the LLNL and SNL/CA construction sites. If the white-tailed kite is present, species-specific mitigation measures in accordance with Section 3511 of the California State Fish and Game Code and Federal Migratory Bird Treaty Act would be implemented as appropriate. These could include the minimization of incremental, construction-related traffic activity during the nesting and rearing seasons if the white-tailed kite is present in these areas. If the loggerhead shrike is present at SNL/CA, construction activities may be delayed or reduced until the young have fledged. The previously identified burrowing owl nest sites in the north and west buffer zones of LLNL and known red-legged frog locations at LLNL are sufficiently distant from the site that no impacts are expected from construction. The proposed activities would not impact existing or designated critical habitat of the California red-legged frog at LLNL. Approximately 2000 linear feet of trenching would occur at SNL/CA within designated critical habitat. This area is grassland with no surface water sources. As such, the area does not provide permanent habitat for red-legged frogs, but serves as a dispersal corridor

between known aquatic sites within the vicinity of SNL/CA. Short-term trenching for utility connections would not create a barrier to dispersal, and would not, directly or indirectly, reduce the capability of designated critical habitat to satisfy requirements essential to the survival and recovery of the red-legged frog. SNL/CA and DOE/Office of Kirtland Site Operations are preparing a biological assessment to address planned and future construction in the critical habitat area as part of continued SNL/CA operations. Although no adverse impacts to the species are expected, any impact mitigation requirements resulting from consultation with the USFWS would be incorporated into this project prior to start of activities. Because both California tiger salamanders and burrowing owls have been observed in the western buffer area near the LLNL recharge basin at the SNL/CA site, pre-construction surveys would be conducted, and if the species were found, the appropriate measures would be implemented to avoid impact. Other wildlife species would not be adversely affected by the proposed action.

A Storm Water Pollution Prevention Plan to be developed and employed during construction would use best management practices to minimize erosion and siltation from disturbed areas of the project site. Upon completion of construction, storm water runoff from rooftops and paved yard areas would be channeled into collection points to the LLNL storm water collection system. The proposed action does not include any new storm drain outfalls to the DRB.

The proposed construction sites are not in areas that were known or suspected waste burial sites. Most waste generated from the construction of the proposal would be excess building materials, although liquid wastes, such as cleaning and sanitary effluents, could also be produced. All wastes, including excess soils, would be collected, sampled and disposed of appropriately and handled in accordance with applicable regulations and LLNL and SNL/CA procedures.

Several subsurface investigations have already been conducted at the proposed activity site during sampling for potential soil contamination, installation of monitoring wells, and trenching for utility connections for adjacent buildings (LLNL only). No evidence of fossil materials was encountered during these investigations. In the event that paleontological or cultural materials are encountered during project construction, a formal process exists to stop construction, assess the find, and ensure that any resources would be

appropriately managed. DOE routinely ensures that staff and contractor personnel engaged in ground-disturbance activities at LLNL are provided appropriate information, that finds of bone fragments, pottery shards or other cultural or paleontological resources are promptly reported, and that the ground-disturbing work is stopped until the proper evaluations are made. These procedures are considered as routine, ongoing actions that implement mitigation measures to avoid adverse impacts from continued operation of LLNL as outlined in the 1992 Sitewide EIS/EIR (DOE 1992) and its January 21, 1993, Record of Decision. At SNL/CA, a standard clause on preservation procedures is included in all construction contracts issued onsite. The Sandia-delegated contract representative would serve as the monitor for archaeological materials found during construction at the SNL/CA site. These procedures are intended to minimize any impact to paleontological or cultural materials discovered during construction activities.

Groundwater monitoring wells currently located close to the proposed site of the new badging facility would not be demolished or relocated as part of the proposed action. These wells provide data on groundwater movement, contaminant concentrations, and other parameters to allow appropriate monitoring of groundwater contamination and meet LLNL's responsibilities under the CERCLA Record of Decision for remediation of the LLNL Livermore site.

### *4.1.2 Potential Impacts from Traffic Diversion*

A traffic study, conducted in 1989 by TJKM Transportation Consultants in advance of the preparation of the 1992 Sitewide EIS/EIR (DOE 1992), evaluated the potential traffic impacts associated with "closing" or limiting public access to East Avenue if it was required for security reasons. This traffic study was also utilized to support the drafting of an Environmental Assessment for the administrative control of East Avenue, and a draft Finding of No Significance (FONSI) in 1992; this project was later cancelled due to funding constraints. Those studies concluded that under future (2010) build-out conditions in the City of Livermore, levels of service at intersections in eastern Livermore would not be substantially altered if East Avenue were closed to the public (TJKM Transportation Consultants 1989). As identified in the 1992 Sitewide EIS/EIR (DOE 1992), the administrative control of a portion of East Avenue and

subsequent alteration of the traffic flow along this roadway segment had a less-than-significant impact and impact mitigations were not warranted.

A recent traffic study conducted by Korve Engineering in February 2002, was prepared to determine the potential traffic impact of this proposed action, and to review whether the assumptions and conclusions of the 1989 traffic study by TJKM Transportation Consultants and the conclusions of the 1992 EIS/EIR remain valid (Korve 2002). The 1989 traffic study by TJKM based its assumptions on improvements to the eastern Livermore road network that included: the reconstruction of the First Street, Vasco Road, and Greenville road interchanges to the partial clover leaf design; the completion of North Mines Road between First Street and East Avenue; the proposed Concannon Boulevard extension; the widening of South Vasco Road and Greenville Road between I-580 and Hawthorne Drive to six lanes and between Hawthorne Drive and East Avenue to four lanes; the signalization at East Avenue/Vasco Road and other major intersections; and a new LLNL entrance on Patterson Pass Road (required when the LLNL population reaches 12,000) (TJKM Transportation Consultants 1989). All of these improvements, except the new entrance to LLNL, have been completed. The 2002 study found that since the combined LLNL and SNL/CA employment has declined from approximately 11,000 in 1989 to a current level of approximately 10,000 (or 9 percent reduction), that the previous study in 1989 is likely conservative in its analysis (Korve 2002). The 2002 study by Korve Engineering also evaluated future traffic conditions up to the year 2020 through the use of the Alameda County Congestion Management Agency's travel demand model. The results predicted only a 0.65 percent annual increase in traffic in the study area. Thus, the levels of service (LOS) for the signalized East Avenue/Vasco Road intersection, and for the East Avenue/Greenville Road intersection, are projected to continue to operate at LOS B or C in 2020 (Korve 2002). Therefore, the proposed action would not result in an increase of potential impacts to local transportation routes beyond those analyzed and presented in the 1992 Sitewide EIS/EIR.

### *4.1.3 Potential Impacts Associated with Postulated Accident Scenario*

In the 1992 EIS/EIR, Volume II, Appendix D, several sitewide accident analyses were conducted which created a bounding envelope of reasonably foreseeable accident scenarios for LLNL and SNL/CA. The bounding envelope

is a set of individual bounding accidents covering the range of probabilities and possible consequences. However, because this proposed project is specific to location and activity, i.e., the operation of a truck inspection station and its proximity to Hazardous Waste Management (HWM) facilities, the discussion will be limited to fuel truck (>3 axle) accidents at the truck inspection facility. The 1992 EIS/EIR (and its 1999 Supplement Analysis (DOE 1999)) outlined the potential impacts of several bounding accident scenarios related to hazardous waste treatment and storage facilities at LLNL. Also, a previous safety evaluation reviewed the B611 gasoline filling station operations and the potential for impacts of large gasoline spills, fires, explosions, uncontrolled expanding vapor clouds (UEVC) or boiling liquid expanding vapor explosions (BLEVE) on HWM facilities (Area 612). It concluded that the probability of catastrophic failures of the HWM facilities leading to large, unacceptable consequences was not credible; and that smaller leaks (5,000 gal gasoline) present very minor exposure hazards to the HWM facilities. A second safety evaluation evaluated the probability, or frequency, of certain consequences of fuel truck (>3 axle) accidents at the proposed location of the truck inspection station that could impact HWM facilities. The evaluation concluded that the frequency of an unmitigated fuel truck accident resulting in a large fire is extremely unlikely; the probabilities of unmitigated fuel truck accidents resulting in an uncontained vapor explosion (UCVE) or a BLEVE is "beyond extremely unlikely"; and that a minor fuel truck accident is judged to be anticipated with "low consequences" on the inspection station and "negligible consequences" on the LLNL hazardous waste management facilities (Area 612). The safety evaluations concluded that the potential impacts associated with the proposed projects are less-than-significant when compared to the bounding envelope of accident scenarios already identified for LLNL and SNL/CA operations in the 1992 EIS/EIR.

### *4.1.4 Cumulative Impacts*

Minor, temporary (short-term) cumulative impacts could potentially occur from construction activities. Fugitive dust and noise from construction may contribute to minor, temporary cumulative impacts if they occur simultaneously with other projected LLNL construction projects, such as the National Ignition Facility (NIF), the Sensitive Compartmented Information Facility (SCIF), and the Terascale Simulation Facility (TSF), and construction projects at SNL, California.

Good engineering and construction practices would assure that these impacts would be minimized to the extent feasible.

The 1992 Sitewide EIS/EIR evaluated the potential growth in employment at the LLNL site from 11,200 employees in 1992 to an estimated 13,200 employees in 2002), and at the SNL/CA site from 1,500 employees in 1992 to an estimated 1,550 employees in 2002 (DOE 1992). The 1992 Sitewide EIS/EIR concluded that the increase in employment would result in an increased demand for housing in the Livermore area. However, as noted in Section 3.8, the actual number of employees has declined significantly from the 1992-estimated level to the current level of 9,631 employees at LLNL, and 1,300 at SNL/CA. Even with the operation of other projects such as NIF, SCIF, and TSF, the total number of LLNL and SNL/CA employees after the East Avenue project is completed would be substantially less than levels projected in the 1992 Sitewide EIS/EIR. Therefore, the proposed action would not result in a significant increase in demand for local housing over the 1992 level when considered cumulatively with other DOE actions that would increase employment.

### *4.1.5 Conformity with State Implementation Plans*

The EPA has established criteria and procedures for demonstrating and assuring conformity of federal actions to the State Implementation Plans (SIPs) for areas that are designated as non-attainment or maintenance for national ambient air quality standards (AAQS) for criteria pollutants (40 CFR 6, 51, and 93). Criteria pollutants include CO, lead, $NO_X$, ozone, $PM_{10}$, and $SO_2$. The San Francisco Bay Area is currently designated as "non-attainment" for federal and state ozone and is "non-attainment" or "unclassified" for federal and state $PM_{10}/PM_{2.5}$, and "in attainment" for all other criteria pollutants (BAAQMD 2002). The BAAQMD has a no-net increase policy that requires emissions from new permitted sources to be offset by emissions reductions within the facility or at other sources within the district. Conformity is demonstrated by showing that additional transportation improvements fall within the "budget" for such emissions included in the State Implementation Plan. Since there will be no new permitted LLNL or SNL/CA sources associated with the construction or operation of the truck inspection station or the kiosks/badging facilities, it is expected that BAAQMD and State Implementation Plan requirements would be met.

### *4.1.6 Environmental Justice*

In accordance with the presidential Executive Order (EO) 12898, dated February 11, 1994, DOE has proposed to establish procedures for identifying and addressing disproportionate adverse human health and environmental effects of their programs, policies, and activities on minority populations, low-income populations, Native American tribes, and populations of non-English-speaking residents (Executive Order 1994). The Livermore site region, on average within a 50-mile radius, does not have more minority or low-income populations than the state average (DOE 1999).

## *4.2 The No-Action Alternative*

Under the no-action alternative, DOE would not administratively control East Avenue between the LLNL and SNL/CA sites, and impacts associated with short-term construction and traffic congestion would not occur.

## *4.3 Construction of New Facilities and Relocation of Personnel and Equipment*

Under the second alternative, DOE would not administratively control East Avenue between the LLNL and SNL/CA sites; however, additional construction of several facilities would occur, and associated construction and operating impacts would be far greater than the impacts of the proposed action.

At the LLNL site, activities in Buildings 111, 113, and 115 (B111, B113, B115) and accompanying personnel and equipment would need to be relocated onsite in a classified area. At the SNL/CA site, activities in Building 912 and accompanying personnel and equipment would need to be relocated to another classified area. At this time, there are no excess or unused facilities at LLNL or SNL/CA that could be economically modified to support these programs; therefore, new construction of four facilities, with approximately 552,000 sq. ft. (LLNL, 424,206 sq. ft./SNL/CA, 128,241 sq. ft.) would be needed to provide housing for these existing personnel and equipment.

Siting and construction of new facilities could have potential impacts on sensitive-species habitat (some of which is already Federally designated Critical Habitat for the California red-legged frog) since such "greenfield" sites, although not usually desirable for siting, may have to become the preferred sites for such new development due to the lack of additional space. Cumulative construction

impacts would include extensive trenching for the extension of water, electrical, sanitary sewer, and telephone lines from existing onsite utilities; additional fugitive dust; noise from general construction activities and equipment; temporary onsite traffic disruptions near the project areas; and disposal of additional waste and debris. Daily operations of these four new facilities would also substantially increase the consumption of electrical and water resources at both LLNL and SNL/CA.

# 5 Names of Agencies and Persons Consulted

No outside agencies were consulted while preparing the EA.

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# 6 Acronyms

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| AAQS | Ambient air quality standards |
| ACA | Administratively controlled area |
| BAAQMD | Bay Area Air Quality Management District |
| BLEVE | Boiling liquid expanding vapor explosions |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| CO | Carbon monoxide |
| DOE | U.S. Department of Energy |
| DRB | Drainage Retention Basin |
| EA | Environmental Assessment |
| EIR | Environmental Impact Report |
| EIS | Environmental Impact Statement |
| EO | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| FEMA | Federal Emergency Management Act |
| FONSI | Finding of No Significant Impact |
| HWM | Hazardous Waste Management Division, LLNL |
| LLNL | Lawrence Livermore National Laboratory |
| LOS | Level of service |
| LWRP | City of Livermore Water Reclamation Plant |
| NEPA | National Environmental Policy Act |
| NPDES | National Pollutant Discharge Elimination System |
| NIF | National Ignition Facility |
| $NO_X$ | Nitrogen oxides |
| $PM_{10}$ | Particulate matter equal to or less than 10 microns in diameter |
| SCIF | Sensitive Compartmented Information Facility |
| SIPs | State Implementation Plans |
| $SO_2$ | Sulfur dioxide |
| SNL/CA | Sandia National Laboratories, California |
| TSF | Terascale Simulation Facility |

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|---|---|
| UCVE | Uncontained vapor explosion |
| UEVC | Uncontrolled expanding vapor clouds |
| USFWS | U. S. Fish and Wildlife Service |

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## APPENDIX A

### Summary of Public Comments Received and DOE Responses

Upon public review of the draft Environmental Assessment (EA) for the proposed East Avenue Security Upgrade project, DOE received three (3) formal comments, in the form of both letters and e-mail messages. After consideration of these comments, no changes to the text of the EA were considered necessary. The more significant comments are abstracted below, along with DOE's responses to the comments.

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**Comment:**
CEQA Review is lacking

**Response:**
The Environmental Assessment (EA) for the proposed East Avenue Security Upgrade project is a review required under the Federal National Environmental Policy Act (NEPA) because the project is a DOE-proposed Federal action, to be done on Federal land. DOE has no CEQA obligation for this project.

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**Comment:**
One commenter suggested that the proposal to close East Avenue in 1992 was a controversial issue.

**Response:**
The proposal to close East Avenue, as proposed in the public-reviewed draft of the *1992 Environmental Impact Statement and Environmental Impact Report for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore* (DOE/EIS-0157, UC/EIR SCH90030847) (1992 EIS/EIR) generated only 3 comments from the community. Two were from the City of Livermore (referring to potential traffic issues and the question of whether DOE would contribute monetarily to road improvements); a third comment was received requesting clarification of the term "unacceptable risk" as it applied to leaving East Avenue open. DOE responses to the comments were provided in Volume IV of the 1992 EIS/EIR. The complete EIS/EIR is available in the DOE public repositories. It may also be accessed through the following website http://www-envirinfo.llnl.gov or by calling 925-424-4026.

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**Comment:**
One comment alleged that the security rationale offered as part of the purpose and need for restricting access to East Avenue was not sufficiently supported with information in the EA. A request was made that DOE do a sitewide security analysis and share that information with the public so that it may determine if this action truly supported the stated purpose and need.

**Response:**
The resulting decision to control access to East Avenue was one of the many upgrades resulting from comprehensive sitewide analysis of all post September 11, 2001 security threats to LLNL and SNL/CA. The analysis of security at DOE

facilities is sensitive and cannot be shared with the public in any unclassified format, including NEPA review documents.

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**Comment:**
There was concern that non-LLNL or non-SNL employees would lose their current ability to access the pool or employee association/education complex, to participate in classes, citizen tours, or official visits, and that bicycle and on-foot access to the site would be curtailed.

**Response:**
Detailed procedures for access to such LLNL and SNL/CA areas by non-employees will be developed before the current access procedures are altered. DOE does not believe that the new procedures will adversely affect the access of non-employees who would participate in such Lab-sanctioned activities.

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**Comment:**
A commenter believed that the EA did not disclose enough supporting information related to the traffic studies that were done regarding the East Avenue closure proposal.

**Response:**
A thorough analysis of potential traffic issue impacts was prepared in support of the EA. The EA presents the conclusions from that study and compared the results to results of traffic analyses done in support of the 1992 EIS/EIR. The comparative results of those analyses are cited in the EA.

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**Comment:**
One comment suggested that there was a lack of additional alternatives for the project. An alternative suggested was to consider closing East Avenue only under high-security situations.

**Response:**
Currently, DOE has the ability to close the federally owned East Avenue under such high-security alert status situations; therefore, such an option is considered to already be part of the "No-Action Alternative". Other alternatives were addressed in the NEPA document and it was determined that the impacts and cost of those alternatives would be much greater than controlling East Avenue.

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**Comment:**
There was concern regarding whether or not the burrowing owl was included among the species considered during the pre-construction surveys done by a biologist. Clarification was requested on what measures would be taken if any sensitive species were found during these surveys.

**Response:**
Burrowing owls are included in the surveys conducted by a biologist in open areas at both LLNL and SNL/CA. This is noted in the draft (and Final) EA (Section 4.1.1 p. 22, first paragraph). If such sensitive species are identified during pre-activity surveys, the project would be stopped or changed so as not to adversely impact the species in question. Also, the appropriate Federal or State

resource agency would be contacted for further instruction and/or application of any needed mitigation measures.

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**Comment:**
A request was made to comment on the Storm Water Pollution Prevention Plan (SWPPP) (that would be developed for the proposed action) before the EA is finalized.

**Response:**
In accordance with CEQ NEPA regulations, an EA is prepared in the early stages of the project planning process. The decision of whether to prepare a project-specific SWPPP is determined after the final engineering design. Thus, preparation of a project-specific SWPPP at this time is premature. If the project does not require an individual construction SWPPP, the general control measures already identified in the current "site-wide" SWPPP would be followed.

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**Comment:**
There was a comment received regarding whether DOE had evaluated the potential for terrorists to use the Altamont Commuter Express (ACE) train to attack LLNL and the surrounding community by loading it with explosives.

**Response:**
DOE considered numerous potential security-related terrorist incidents and potential accident-related scenarios in identifying and assessing a bounding envelope of reasonably foreseeable scenario impacts from implementing the proposed project. The evaluation concluded that the potential impacts associated with the proposed project are less-than-significant when compared to the bounding envelope of accident scenarios already identified for LLNL and SNL/CA operations in the 1992 EIS/EIR. The draft EA presented the "most bounding" of these scenario impacts. (Section 4.1.3)

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**Comment:**
A request was made to comment on the sampling methods for monitoring construction-site wastes to ensure, if they are found to be contaminated, that they would be managed properly.

**Response:**
Characterizing construction-site waste is a common, routine activity for LLNL and SNL/CA and established procedures are in place for these activities. All waste destined for disposal is evaluated prior to leaving the construction site. The evaluation may consist of a search of historical documents to determine if contamination is likely and/or it may include detailed sampling and analysis. Although not likely, in the event that contamination is found above regulatory levels, the waste would be properly packaged, labeled, treated and/or disposed of according to state and federal regulations and the provision of the sites' Resource Conservation and Recovery Act Part B Permits.

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**Other comments and DOE response:**
Several other comments received were considered not directly related to analysis of potential impacts from the proposed project and are therefore not directly responded to by DOE in this EA. Below is a summary of those comments.

- Request for a longer public comment period
- Comments related to the scope of the currently proposed "sitewide" EIS
- Comments related to ongoing plutonium and tritium-related programs
- Application of congressional budgets to other societal needs
- Concern regarding a potential impact to the community's ability to protest along East Avenue
- General comment expressing opposition to ongoing defense work at LLNL